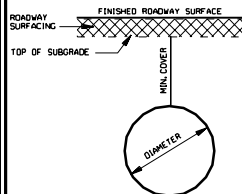
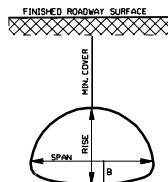


## METAL & PLASTIC CULVERTS



## METAL PIPE ARCHES

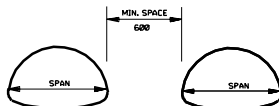


### MINIMUM COVER

- MEASURE MINIMUM COVER FROM THE TOP OF THE PIPE CULVERT TO THE BOTTOM OF ROADWAY SURFACING.
- MEASURE MAXIMUM FILL HEIGHT FROM THE TOP OF THE PIPE TO THE TOP OF THE PAVEMENT FOR BOTH FLEXIBLE AND RIGID PAVEMENTS.
- MINIMUM COVER OVER THE CROWN OF THE PIPE IS ADEQUATE ONLY FOR FINISHED CONSTRUCTION. DURING CONSTRUCTION THE CONTRACTOR WILL PROVIDE ADEQUATE MINIMUM COVER TO PROTECT PIPE AND PIPE ARCH FROM DAMAGE.

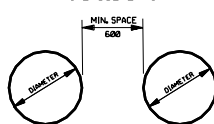
## MULTIPLE INSTALLATIONS

### PIPE ARCHES



SPAN	MINIMUM SPACE
UP TO 900	600
1000 TO 2150	1/3 SPAN

### PIPE CULVERTS



DIAMETER	MINIMUM SPACE
UP TO 600	600
1200 TO 2500	1/2 DIAMETER
2500 TO 3050	1200



## METAL INSERT

FOR CONNECTING CONCRETE PIPE OR CORRUGATED POLYETHYLENE PIPE TO METAL END SECTION.



16 mm GALV. BOLTS  
WITH 3 NUTS PER BOLT.



## METAL INSERTS

- FABRICATED END SECTION FROM NON FLAMABLE MATERIALS.
- CONNECT METAL END SECTIONS TO CONCRETE PIPES OR PLASTIC PIPES USING METAL INSERTS.
- FOR PIPE DIAMETERS UP TO AND INCLUDING 1500 mm THE LENGTH OF INSERT SHALL BE AT LEAST 300 mm USING A MINIMUM OF 2 BOLTS.
- FOR PIPE DIAMETERS GREATER THAN 1500 mm THE LENGTH OF INSERT SHALL BE AT LEAST 450 mm USING A MINIMUM OF 3 BOLTS.
- GALVANIZED METAL INSERT AND ALL BOLTS, WASHERS AND RIVETS OR WELDS.
- WALL THICKNESS OF THE METAL INSERT SHALL BE THE SAME AS THE METAL END SECTION.
- ALL WELDS SHALL BE CLEANED AND COATED WITH APPROVED ZINC RICH COMPOUND AS RECOMMENDED BY THE SHEET MANUFACTURER.

REVISIONS 1. 11/21/83 P.M. (CONNECTED SHEET NUMBER) 2. 11/21/83 P.M. (CONNECTED SHEET NUMBER) 3. 11/21/83 P.M. (CONNECTED SHEET NUMBER) 4. 11/21/83 P.M. (CONNECTED SHEET NUMBER) 5. 11/21/83 P.M. (CONNECTED SHEET NUMBER) 6. 11/21/83 P.M. (CONNECTED SHEET NUMBER) 7. 11/21/83 P.M. (CONNECTED SHEET NUMBER) 8. 11/21/83 P.M. (CONNECTED SHEET NUMBER) 9. 11/21/83 P.M. (CONNECTED SHEET NUMBER) 10. 11/21/83 P.M. (CONNECTED SHEET NUMBER)		REMARKS _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	
UTAH DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION SALT LAKE CITY, UTAH		RECOMMENDED FOR APPROVAL CHAIRMAN STAGANOS COMMITTEE SECRETARY DIRECTOR	
(METRIC) MISCELLANEOUS PIPE DETAILS		STANDARD DRAWING TITLE 685-8	